

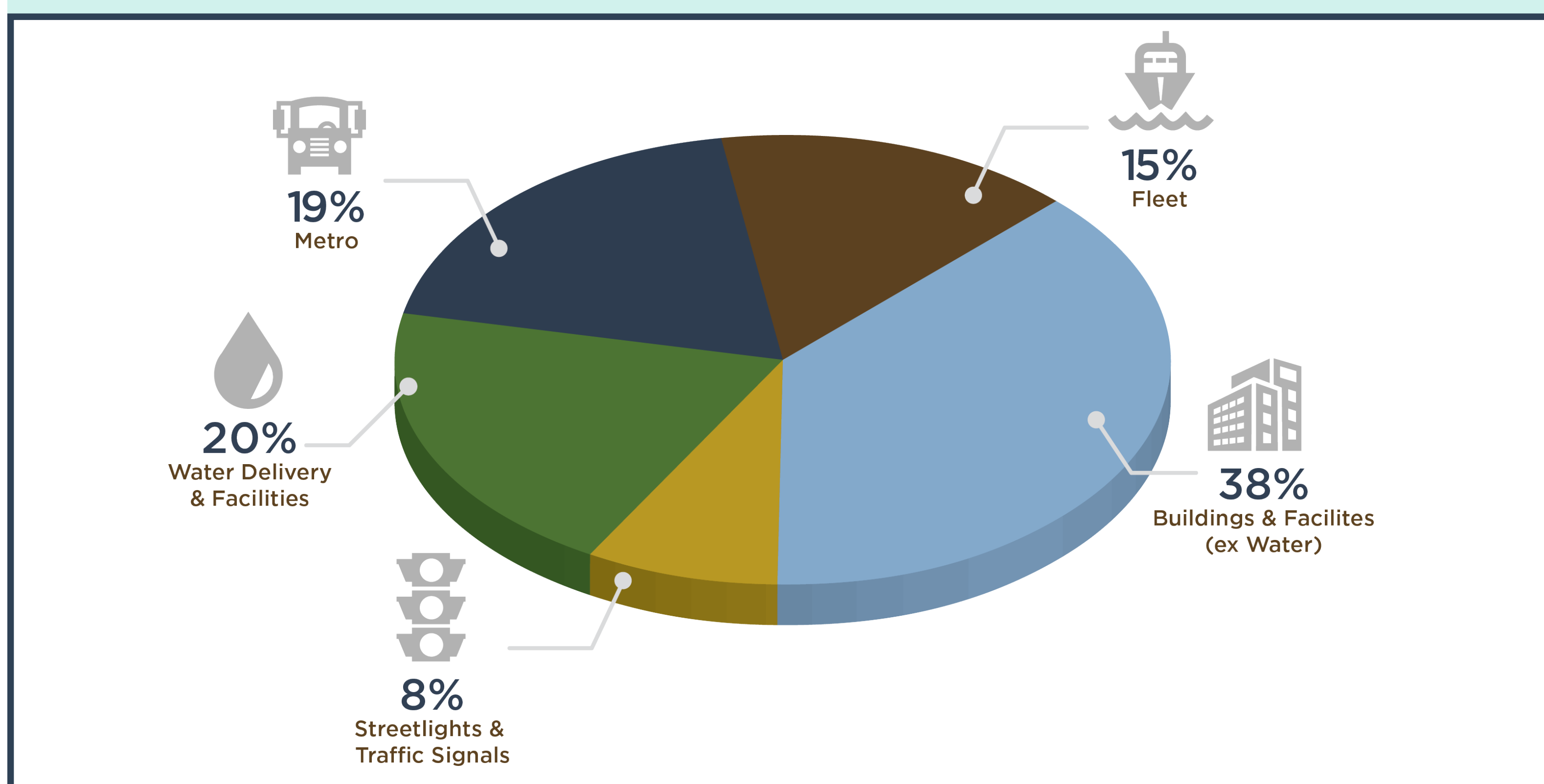


100% RENEWABLE MADISON: ACHIEVING 100% RENEWABLE ENERGY & ZERO NET CARBON FOR CITY OPERATIONS AND LEADING THE COMMUNITY

ENERGY GOAL: REDUCE CARBON FOOTPRINT & PROMOTE RENEWABLE ENERGY

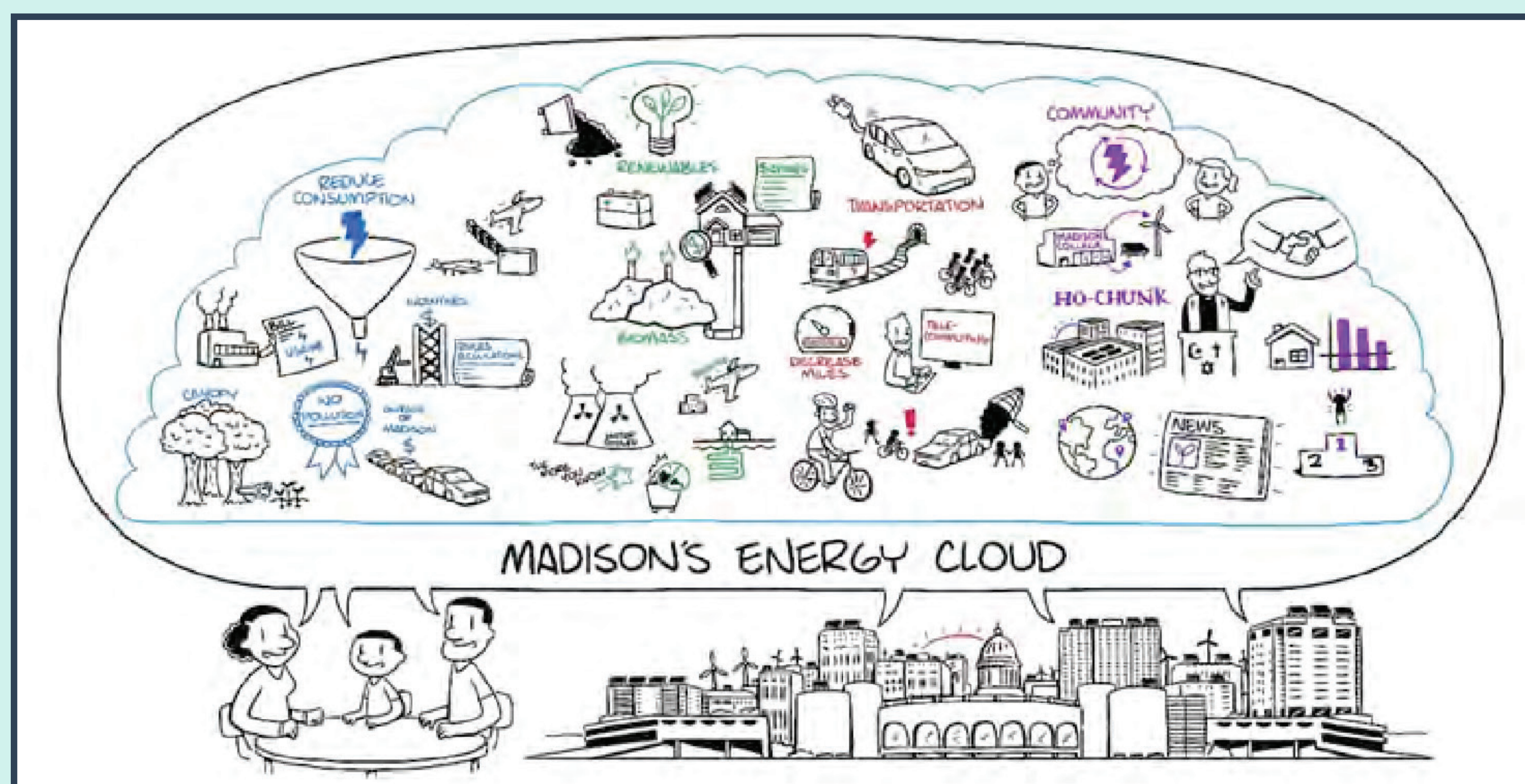
CITY OPERATIONS CARBON FOOTPRINT

City operations include 63 major buildings and over 300 structures with over 3.2 million square feet; 1,017 vehicles and equipment; 218 buses; 21 pumping stations that pump 10 billion gallons a year; and 3,500 employees (2,800 FTE employees).



WHAT DOES 100% RENEWABLE MADISON LOOK LIKE TO YOU?

People were invited to submit their ideas to reduce energy consumption, add renewable energy, and work with community partners or organizations to help accomplish the energy goal. Their responses were captured in illustrations to create a vision for the future, the Madison Energy Cloud.



OUTCOME: ACHIEVE ENERGY GOALS WITH CO-BENEFITS TO CITY

By 2030, local government operations will:

- Cut carbon emissions by 55% (426,000 metric tons).
- Generate 25% of electricity by self-generated renewable energy.
- Reduce use of transportation fuels to near zero.
- Invest in clean energy and carbon offsets, meeting city criteria.
- Review strategies every two years to stay on target.

• **Core Services:** Efficient city facilities and vehicles reduce energy waste, saving \$78 million from avoided fuel costs. Less reliance on imported fossil fuels results in more dollars staying in Wisconsin's economy.

• **Public Health:** Climate change is a public health crisis. Harmful air pollutants from emissions are associated with asthma and premature mortality. Avoiding these hazards brings estimated societal benefits between \$21 million and \$162 million by 2030 (using global averages for avoided mortality from Co-benefits of Global Greenhouse Gas Mitigation for Future Air Quality and Human Health Nat Clim Chang. 2013 Oct 1)

• **Economic Development:** Clean energy supports 75,000+ jobs in Madison and throughout Wisconsin.

COST-EFFECTIVE INVESTMENTS



TRANSPORTATION

- Greening the fleet by training operators and using GPS and telematics
- Adding electric vehicles and charging stations at city facilities
- Promoting public transit to reduce air pollution
- Maintaining and expanding bike paths and bike lanes to promote active transportation



ENERGY EFFICIENCY

- Implementing efficiency projects at city facilities
- Tracking facility energy usage data
- Greening new construction standards
- Promoting efficient and affordable housing



RENEWABLE ENERGY

- Adding solar and storage at city facilities
- Working with utilities to develop large-scale solar
- Investing in rural solar projects to promote economic development
- Solar installer program provides hands-on training to improve job skills



OUTCOME: LEADING BY EXAMPLE FOR THE GREATER COMMUNITY

• **Lead By Example:** Efficient and more resilient city facilities demonstrate best practices for the private sector and other local governments.

• **City-Utility Collaboration:** City officials are working with MGE, Alliant Energy, and the Wisconsin Focus on Energy program to reduce energy waste and add renewable resources.

• **Education:** Continue and expand funding for MadiSUN and other programs to promote clean energy.

• **Climate Equity:** Implementing clean energy with community organizations and empowering people to make a difference.